

Oroville Facilities Relicensing

SP-F5/7 TASK 2 ACHIEVEMENT OF CURRENT STOCKING GOALS

September 29, 2004



STUDY OBJECTIVE

- Task 2 of Study Plan SP-F5/7 Evaluation of Fisheries Management on Project Fisheries
- Evaluation of whether the current stocking goals for Lake Oroville and the Thermalito Forebay have been achieved



CURRENT STOCKING PROGRAMS (2)

- Lake Oroville
- Thermalito Forebay
- Both are Salmonid Stocking Programs



LAKE OROVILLE PROGRAM

- Implemented by DWR
- Stock 170,000 salmonids (annually)
- Coho salmon are current salmonid
- “Put-and-grow” type of program



HISTORY OF L. OROVILLE PROGRAM

- L. Oroville stocking began in 1968
- 1968 – 1992: RBT, BN, KS, COHO, KOK, BKT, LT
- Supply problems late 80s and early 90s
- 1993-2000: DWR/DFG: KS and BN
- 2000: Recommendation for 170,000 KS
 - Criteria: Growth to 13 in. at 18 months, 16 in. at 24 mo.



HISTORY OF L. OROVILLE PROGRAM (CONT'D)

- 2000: IHN Virus problem at FRH
- 2001: DFG IHN studies – Coho were resistant
- 2002: Eggs from commercial hatchery in WA
- 2002 & 2003: Coho stocked: 178,529 and 172,792, respectively
- 2004: Disease problem with brood stock (BKD)
- 2005 – End of Current License: Coho proposed for stocking, need to reach agreement with NOAA, DFG. Risk assessment being prepared



THERMALITO FOREBAY PROGRAM

- Implemented by DFG
- Stock 30,000 catchable RBT (annually)
- Put-and-take type program



HISTORY OF FOREBAY PROGRAM

- Less complicated than Oroville program
- Stocking began in 1981
- Species: RBT, BKT, BN
 - Since 2003, only RBT due to disease concerns



ACHIEVEMENT OF CURRENT STOCKING GOALS

- Identify stocking goals for each water
- Assess whether these goals are being achieved



LAKE OROVILLE STOCKING GOALS

- Current program of stocking coho is new
- Utilizes goals established for KS during 1993-1999 DWR/DFG study
 - Stock 170,000 coho (annually)
 - Growth: 13 in. at 18 months, 16 in at 24 months
- Angler Satisfaction – the best test of all



LAKE OROVILLE STOCKING PROGRAM RESULTS

- 170,000 coho stocking goal was achieved in 2002 and 2003, not in 2004
- Growth goals were achieved: Coho grew very fast, reaching 15 inches at 18 months of age, and some exceeding 20 inches at 24 months of age



LAKE OROVILLE STOCKING PROGRAM RESULTS (Cont'd)

- Very high level of angler satisfaction
 - Unique fishery, only lake in CA with coho
 - Shallower orientation than KS, easier to catch
 - Good fighting ability, excellent eating
 - Numerous articles in local and state fishing publications
 - Requested by local recreation groups



L. OROVILLE COHO (23 in.)



LAKE OROVILLE PROGRAM CONCLUSION

- Lake Oroville stocking program is achieving its current stocking goals, though current reliability of egg source is questionable and needs to be strengthened
 - DFG pathologists have been advising WA Hatchery on better rearing techniques
 - DFG/DWR pursuing additional egg sources
 - DFG/DWR will initiate investigation of using Lake Oroville coho as brood stock
- NOAA, DWR and DFG Agreement needed this fall



FOREBAY STOCKING GOALS

- Current program is utilizing goals in DFG's: *Strategic Plan for Trout Management, a plan for 2004 and Beyond*
 - Criteria in *Strategic Plan* for put-and-take-programs:
 - Hatchery trout, 10-12 inches long
Stocked in easily accessible, public water, with high recreational angling demand
 - Goal of achieving at least a 50% return to the angler by number, or weight (may be revised)
- Angler Satisfaction – the best test of all



FOREBAY STOCKING PROGRAM RESULTS

- Forebay meets *Strategic Plan* criteria:
 - Easily accessible, public water, high recreational demand
- Forebay return rate is 22% by number – below the 50% Return Policy of the California Fish and Game Commission
 - The Commission established this policy in the late 1950s and DFG has often had difficulty achieving this goal, even in some of its most popular waters
 - A recent DFG study of 16 lakes and reservoirs in Region 2 found that none met the 50% criteria
 - Thermalito Forebay ranked 6th out of 16



<u>WATER</u>	<u># TAGGED</u>	<u>RETURN RATE</u>
Sugar Pine	1194	32%
Fuller	1126	31%
Red	905	30%
Scott's Flat (Upper)	699	26%
Ice House	399	25%
Thermalito Forebay	797	22%
Jenkinson	1194	21%
Folsom	1295	18%
Rollins	798	17%
Boca	1200	15%
Donner	1899	13%
Union Valley	400	12%
Jackson Meadows	299	9%
Bucks	500	9%
Loon	400	9%
Stampede	1691	5%



FOREBAY STOCKING PROGRAM RESULTS (CONT'D)

- Angler Satisfaction is high
 - SP-R13 (Recreation Workgroup) reported that 80% of the anglers contacted were satisfied, 2nd Highest at project
 - Angling accounted for 24% of total use of Forebay, 2nd only to picnicking (32%)



FOREBAY PROGRAM CONCLUSION

- Forebay stocking program is achieving its current stocking goals
 - Provides an attractive angling opportunity
 - High level of angler satisfaction
 - Adequate return to angler (6th highest in DFG Region 2 study)

